

ABSTRACT OF THE DISCLOSURE

A system for diagnosing operation of a delta pressure sensor used with an internal combustion engine comprises an intake manifold and an exhaust manifold each operatively coupled to the engine, an EGR conduit fluidly coupled between the intake and exhaust manifolds, and a flow restriction mechanism disposed in-line with the EGR conduit, wherein the delta pressure sensor produces a delta pressure signal indicative of a pressure differential across the flow restriction mechanism. A control computer compares the delta pressure signal to a modeled delta pressure value modeled as a function of at least engine speed and one of engine load and engine output torque percentage, and diagnoses a fault state of the delta pressure sensor based on the comparison.